

REMARKS

Claims 10, 19, 25-28, 30, 31, 37, and 42 are pending in this application. Claims 13 and 20 are canceled. Claims 10, 25, 30, and 37 are amended as discussed below. Claim 27 was amended for clarity. Claim 28 was amended to correct for improper dependency. New claim 42 is added in this Amendment. Support for new claim 42 is found in the specification in Example 9. No matter is added through this amendment.

Election/Restrictions and Claim Objections

Claim 13 has been canceled thus removing need to further restrict this claim.

Priority

A petition will be submitted to amend the claim priority to recite that the present application is a continuation of United States Serial Number 09/234,238, filed January 20, 1999, now abandoned, which is a continuation of United States Serial Number 08/440,522, filed May 12, 1995, now abandoned, which is a continuation-in-part of United States Serial Number 08/089,372, filed July 8, 1993, now abandoned, which claims benefit of the filing date of Australian Provisional Application Serial Number PL 4801 filed on August 14, 1992.

Specification

The brief descriptions of Figures 2 and 3 have been amended to introduce the SEQ ID numbers associated with the referenced polypeptides.

The brief description of Figure 4 has been amended to refer to parts a and b.

Claim Objections

Claims 13, 20, and 30 were objected to as encompassing non-elected inventions. Claims 13 and 20 have been canceled. Claim 30 has been amended to remove reference to non-elected inventions.

35 U.S.C. §112, second paragraph

Claim 10 has been amended as per the Examiner's suggestion to clarify claim language.

Claim 25 has been amended to add the term "said nucleic acid molecule" to clarify claim language.

35 U.S.C. §112, first paragraph, Written Description

Claims 10, 19, 25-28, 31, 37, and 38 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Claim 10 has been amended to recite an isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of a) the nucleotide sequence set forth in SEQ ID NO:39; b) the nucleotide sequence set forth in SEQ ID NO:47; c) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 40, and d) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 50.

The invention is described in terms such that one of skill in the art would recognize that the Applicant had possession of the invention at the time of filing. As noted by the Examiner, the specification describes the nucleotide sequences encoding SEQ ID NOs: 40 and 50 and the nucleotide sequences of SEQ ID NOs: 39 and 47. Thus, the Applicant clearly had possession of claimed invention as recited in amended claim 10, and claims 19, 25-28, and 38 dependent thereon.

The only other independent claim recited in this rejection, claim 37, has been similarly amended. Specifically, amended claim 37 recites a method of controlling insect attack of a plant

comprising inserting into the plant a first nucleic acid molecule selected from the group consisting of a) the nucleotide sequence set forth in SEQ ID NO:39; and b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 40, and a second nucleic acid molecule selected from the group consisting of: c) the nucleotide sequence set forth in SEQ ID NO:47; and d) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 50, wherein said first nucleic acid molecule and said second nucleic acid molecule further comprise a ribozyme for facilitating replication, expression or encapsidation of said nucleic acid molecule and wherein the plant produces HaSV viral particles, and insects feeding on the plant are deleteriously effected.

The invention is described in terms such that one of skill in the art would recognize that the Applicant had possession of the invention at the time of filing. As discussed above, the specification describes the nucleotide sequences encoding SEQ ID NOs: 40 and 50 and the nucleotide sequences of SEQ ID NOs: 39 and 47 as well as setting forth use of the sequences in a method of controlling insect attack of a plant. Thus, the Applicant clearly had possession of claimed invention as recited in amended claim 37.

Applicant respectfully requests withdrawal of the written description rejection as it applies to amended claims 10 and 37, and claims dependent thereon.

35 U.S.C. §112, first paragraph, Enablement

Claims 10, 19, 25-28, 31, 37, and 38 are rejected under 35 U.S.C. §112, first paragraph, for lack of enablement.

The Examiner has found that the specification is enabling for SEQ ID NO:39, SEQ ID NO:47, and nucleic acids encoding SEQ ID NO:40 and SEQ ID NO:50. The Examiner has also found the specification enabling for a method of controlling insect attack of a plant comprising inserting into the plant a first nucleic acid molecule encoding the amino acid sequence of SEQ ID NO: 40, and a second nucleic acid molecule encoding the amino acid sequence of SEQ ID NO: 50, wherein nucleic acid molecules also comprise a ribozyme. However, the Examiner asserts that the specification is not enabling for nucleotide sequences that encode fragments of SEQ ID NO:40 and SEQ ID NO:50 or nucleotide sequences that encode amino acid sequences that differ

from SEQ ID NO:40 and SEQ ID NO:50. Additionally, the Examiner asserts that the specification does not teach any nucleotide sequences that have at least 90% identity with SEQ ID NOs: 39 or 47.

Claim 10, and claims 19, 25-28, and 38 dependent thereon

Claim 10 has been amended to recite an isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of a) the nucleotide sequence set forth in SEQ ID NO:39; b) the nucleotide sequence set forth in SEQ ID NO:47; c) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 40, and d) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 50.

As noted the Examiner, the specification is enabling for SEQ ID NO:39, SEQ ID NO:47, and nucleic acids encoding SEQ ID NO:40 and SEQ ID NO:50. As such, Applicant respectfully requests withdrawal of the rejection as it applies to amended claim 10, and claims 19, 25-28, and 38 dependent thereon.

Claim 37

Claim 37 has been amended to recite a method of controlling insect attack of a plant comprising inserting into the plant a first nucleic acid molecule selected from the group consisting of a) the nucleotide sequence set forth in SEQ ID NO:39; and b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 40, and a second nucleic acid molecule selected from the group consisting of: c) the nucleotide sequence set forth in SEQ ID NO:47; and d) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 50, wherein said first nucleic acid molecule and said second nucleic acid molecule further comprise a ribozyme for facilitating replication, expression or encapsidation of said nucleic acid molecule and wherein the plant produces HaSV viral particles, and insects feeding on the plant are deleteriously effected.

As the Examiner noted that the specification is enabling for a method of controlling insect attack of a plant comprising inserting into the plant a first nucleic acid encoding the amino acid sequence of SEQ ID NO: 40, and a second nucleic acid molecule encoding the amino acid

sequence of SEQ ID NO: 50. The Examiner stated that claim 37 requires the inclusion of a ribozyme with the nucleic acid sequences encoding the replicase and capsid precursor because in the absence of the ribozyme the infectious HsSV particles cannot be obtained. Claim 37 has been amended to recite that the first nucleic acid molecule and second nucleic acid molecule further comprise a ribozyme. As such, amended claim 37 satisfies the requirements of 35 U.S.C. §112, first paragraph. Applicant requests withdrawal of the rejection.

Claim 38

Claim 38 has been deleted, thus obviating this rejection.

Conclusion

Applicants respectfully submit that the claims are in condition for allowance and an early notification of such is solicited.

Please direct any calls in connection with this application to the undersigned at (415) 781-1989.

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Respectfully submitted,

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